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			2135	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,115

Applicant(s)

FAHRAEUS ET AL.

Examiner

Ly V. Hua

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/23/01, 3/29/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The Applicant is hereby reminded to fill in the blank space on page 23 of the specification.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

3. Claims 2, 4-10, 20, 31-42, 46, and 48-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. With regard to claim 2:

- a. It is not clear whether the pattern, which is being converted by the converting step, is
 - i the pattern before it is recorded or
 - ii the pattern which is supposed to be in a record formed by the recording step.
 - iii It appears that the preposition "from" in this claim is being misused.

5. With regard to claims 4, 6 and 8:

- a. The phrase "only if ..." in each of these claims is contradictory with the phrase "if ..." in their parent claim 1.

6. With regard to claims 4, 5, 7 and 8:

- a. It is not clear as to whence in the sequence of the steps of claim 1 that the sequence of steps of each of the claims 4, 6, 7 and 8 occurs.

7. With regard to claim 5:

- a. This claim depends on claim 4 and thus inherits the problem under 35 USC 112, second paragraph, therefrom.

8. With regard to claims 9 and 10:

- a. These claims depend on claim 8 and thus inherit the problem under 35 USC 112, second paragraph, therefrom.

9. With regard to claim 10:

- a. It is not clear as to how it is possible that the identification code (which identification code is digital information from the digital pen) corresponds to the access protected unit (which protected unit is a hardware). Due to this problem the checking step in claim 10 appears to be not logical.

10. With regard to claim 20:

- a. The limitation that the access-protected unit is being a digital pen in its context is confusing. This is because the pen is used for signing a signature, which signing produces at least one pair of coordinates which is read by the user unit, without which pair of coordinate the access protected unit cannot be accessed.

11. With regard to claim 30:

- a. It is not clear as to how the information about a plurality of "coordinate areas" is used by the checking device.

i Notice that the processor does not use the information about the plurality of coordinate areas at all (rather it only uses the at least one coordinates pair {which coordinates pair is assumed to be the one that is received by the receiving step}).

(1) With this problem of indefiniteness the examiner cannot patentable weight on "the information about at least one coordinate areas."

12. With regard to claims 31-42:

- a. These claims depend on claim 30 and thus inherit the problem under 35 USC 112, second paragraph, therefrom.

12. With regard to claim 31:
 - a. The phrase "the coordinates" lacks antecedent basis.
13. With regard to claim 34:
 - a. It is not clear as to how the information about a plurality of "coordinate *areas*" is used by the checking device.
 - i. Notice that the processor does not use the information about the plurality of coordinate areas at all.
14. With regard to claim 36:
 - a. It is not clear as to how the information about a plurality of "coordinate *areas*" is used by the checking device.
 - i. Notice that the processor does not use the information about the plurality of coordinate areas at all.
 - b. It is not clear how the program and the function "is associated" with the one of the plurality of coordinate areas. This results in that the meaning of the word "associated" is indefinite.
 - c. With the problems of indefiniteness in claim 36 as listed above, the limitations in this claim 36 cannot be given with patentable weight.
15. With regard to claim 37:
 - a. The communication interface has no interaction with other components of the checking device. The function of this interface is not clear.
16. With regard to claims 38-41:
 - a. Each of these claims does not further limit the limitation of claim 35 upon which it depends.
 - i. Notice that:
 - (1) the parent claim 35 does not recite any communication interface and
 - (2) Claim 30, upon which claim 35 depends, also does not recite any communication interface.
 - b. The phrase "the communication interface" in each of these claims lacks antecedent basis.
17. With regard to claim 42:
 - a. The phrase "only if ..." is this claim is contradictory with the phrase "if ..." in their parent claim 30.
18. With regard to claims 46, 48 and 50:
 - a. The phrase "only if ..." in each of these claims is contradictory with the phrase "if ..." in their parent claim 43.
19. With regard to claims 46, 48, 49 and 50:
 - a. It is not clear as to where in the sequence of instructions of claim 43 that the sequence of instructions of each of the claims 44, 48, 49 and 50 occurs.
20. With regard to claim 47:
 - a. This claim depends on claim 46 and thus inherits the problem under 35 USC 112, second paragraph, therefrom.
21. With regard to claims 51 and 52:
 - a. These claims depend on claim 50 and thus inherit the problem under 35 USC 112, second paragraph, therefrom.

Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

23. Claims 11, 13-27, 29, 30 and 32-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Beatson et al (5,892,824 hereinafter Beatson).

<p>24. Claim 30 claims a checking device</p> <ul style="list-style-type: none"> a. for checking <ul style="list-style-type: none"> i a user's access <ul style="list-style-type: none"> (1) to an access protected unit, b. the checking device comprising: <ul style="list-style-type: none"> i memory <ul style="list-style-type: none"> (1) for storing <ul style="list-style-type: none"> (a) information <ul style="list-style-type: none"> (i) about at least one coordinate area; and ii a processor <ul style="list-style-type: none"> (1) operative to: <ul style="list-style-type: none"> (a) receive <ul style="list-style-type: none"> (i) at least one pair of coordinates; 	<p>25. As to claim 30:</p> <ul style="list-style-type: none"> a. Beatson et al (5,892,824) teaches a checking device [200] <ul style="list-style-type: none"> i for checking <ul style="list-style-type: none"> (1) a user's access <ul style="list-style-type: none"> (a) to an access protected unit [52 or 54], ii comprising: <ul style="list-style-type: none"> (1) memory [element 252 inside element 66] <ul style="list-style-type: none"> (a) for storing <ul style="list-style-type: none"> (i) information [see Figure 6] <ul style="list-style-type: none"> 1) about at least one coordinate area; and (2) a processor [200] <ul style="list-style-type: none"> (a) operative to: <ul style="list-style-type: none"> (i) receive [via element 218] <ul style="list-style-type: none"> 1) at least one pair of coordinates;
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<p>26. Claim 11 claims a system</p> <p>a. for controlling</p> <p>i a user's access</p> <p>(1) to an access-protected unit,</p> <p>b. comprising:</p> <p>i a user unit</p> <p>(1) for reading</p> <p>(a) at least one pair of coordinates;</p> <p>ii a checking device</p> <p>(1) for</p> <p>(a) checking,</p> <p>(i) on the basis of the at least one pair of coordinates,</p> <p>(ii) if the user is authorized to access the access-protected unit;</p> <p>(b) providing</p> <p>(i) an enabling signal</p> <p>(ii) to the access protected unit</p> <p>(iii) when the checking device determines that access is authorized.</p>	<p>27. As to claim 11:</p> <p>a. Beatson et al (5,892,824) teaches a system [Figure 2]</p> <p>i for controlling</p> <p>(1) a user's access</p> <p>(a) to an access-protected unit [52],</p> <p>ii comprising:</p> <p>(1) a user unit [64 (see Figure 2 or 4)]</p> <p>(a) for reading [when an individual signs a signature by using element 74]</p> <p>(i) at least one pair of coordinates [as produced by element 218 (Fig. 5)];</p> <p>(2) a checking device [element 200]</p> <p>(a) for</p> <p>(i) checking, [via element 510 (step 432 or step 806),</p> <p>1) on the basis of the at least one pair of coordinates,</p> <p>2) if the user is authorized to access the access-protected unit;</p> <p>(ii) providing [by a combination of steps 404 and 406]</p> <p>1) an enabling signal</p> <p>2) to the access protected unit [52 or 54]</p> <p>3) when the checking device determines that access is authorized [as verified as "yes" by step 808].</p>
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<p>28. 13. The system of claim 11 further comprising</p> <p>a. a base</p> <p>i provided</p> <p>(1) with a position coding pattern,</p> <p>(2) wherein said user unit is configured</p> <p>(a) to read</p> <p>(i) the position coding pattern</p> <p>(ii) from the base and</p> <p>(b) to convert</p> <p>(i) the position coding pattern</p> <p>(ii) to the at least one pair of coordinates.</p>	<p>29. As to claim 13:</p> <p>a. Beatson teaches that his system further comprises:</p> <p>i a base [66]</p> <p>(1) provided with position coding patterns [see Figure 6]</p> <p>(a) which position coding patterns is read by the user unit, which user unit then converts the position coding pattern to the at least one pair of coordinates [see col. 19].</p>
<p>30. 14. The system of claim 11, wherein the user unit is further operable</p> <p>a. to read</p> <p>i a sequence of coordinate pairs</p> <p>(1) which describe</p> <p>(a) displacement</p> <p>(i) of the user unit</p> <p>(ii) when a user is writing with the user unit.</p>	<p>31. As to claim 14:</p> <p>a. Beatson teaches that is his user unit [64] is further operable to read [via element 218]</p> <p>i a sequence of coordinate pairs</p> <p>(1) which describe</p> <p>(a) displacement</p> <p>(i) of the user unit</p> <p>(ii) when a user is writing with the user unit [or rather pen 74 of the user unit 64].</p>
<p>32. 15. The system of claim 14 wherein the checking device is operable</p> <p>a. to compare</p> <p>i the sequence of coordinate pairs</p> <p>ii with a stored sequence of coordinate pairs and,</p> <p>b. on the basis of a favorable comparison, to provide</p> <p>i an enabling signal</p> <p>ii to the access protected unit.</p>	<p>33. As to claim 15:</p> <p>a. Beatson teaches that his checking device is operable</p> <p>i to compare [step 432, col. 6, lines 46-49] the sequence of coordinate pairs with a stored sequence of coordinate pairs, and</p> <p>ii provide an enabling signal if the comparing results is favorable.</p>

34. 16. The system of claim 15 wherein the stored sequence of coordinate pairs a. represent i a user's signature.	35. As to claim 16: a. Beatson's stored sequence of coordinate pairs represents a user's signature.
36. 17. The system of claim 15 wherein a. the stored sequence of coordinate pairs i represents (1) a function or program within the access protected unit, and b. the checking device is operable i to activate (1) the function or program within the access protected unit (2) based on the favorable comparison.	37. As to claim 17: a. It is inherent that the user's stored sequence of coordinate pairs represents a function with Beatson's access protected unit. This is because the financial institution (such as Beatson's element 56 would rely on a user's input if his/her signature represented coordinate pairs to have access to accounts in element 56. b. Beatson teaches that positive result of the comparing done by his user device 64 would authorized the positively authenticated user have access to the protected units [56]. The function of accessing the protected unit is thus activated.
38. 18. The system according to claim 11, wherein the checking device is integrated with the user unit.	39. As to claim 18: a. Beatson shows that his checking device i is integrated (1) with the user unit [64].
40. 19. The system according to claim 11, wherein the access protected unit is integrated with the user unit.	41. As to claim 19: a. Beatson teaches that the protected unit [52, 54] is integrated [as shown in Figure 1] with the user unit [64].

42. 20. The system according to claim 11, wherein the access protected unit is a digital pen.	43. As to claim 20: a. The applicant is hereby informed the limitation that the access protected unit is a digital pen is given no patentable weight as being an item that is protected by the system which controlling a user's access to the digital pen, rather than the digital pen being a component of the system. b. Thus claim 20 is rejected together with claim 11.		
44. 21. The system according to claim 11, wherein a. information about a plurality of coordinate areas i is stored ii in the checking device.	45. 22. The system according to claim 21, wherein a. the access protected unit i is associated (1) with at least one of said plurality of coordinate areas.	46. 23. A system according to claim 21, wherein a. at least one authorized user identity i is associated (1) with at least one of said plurality of coordinate areas.	47. As to claims 21-23: a. Beatson teaches that his system serves more than one user, each of which users has his/her unique signature and thus the coordinates pair, which coordinates pair is stored for each user.
48. 24. The system according to claim 11 further comprising a. a server unit i in communication with (1) the user unit and (2) the access protected unit.	49. As to claim 24: a. Beatson teaches that his system further comprising i a server unit [62] (1) in communication with (a) [through element 52] the user unit [64] and (b) the access protected unit [56].		

<p>50. 25. The system according to claim 24 wherein</p> <p>a. the user unit further comprises</p> <p>i a wireless communication unit</p> <p>(1) in communication</p> <p>(a) with a network access unit</p> <p>(i) in communication with the server unit.</p> <p>51. 27. The system according to claim 24 wherein the user unit further comprises</p> <p>i a wireless communication unit</p> <p>(1) in communication</p> <p>(a) with the server unit.</p> <p>52. 26. The system according to claim 24 wherein the user unit further comprises</p> <p>i a network access unit</p> <p>(1) in communication</p> <p>(a) with the server unit.</p>	<p>53. As to claims 25, 26 and 27:</p> <p>a. Beatson teaches that his user unit comprises</p> <p>i a network access unit [210 which is a communication unit]</p> <p>(1) in communication</p> <p>(a) with a network access unit [52]</p> <p>(i) in communication with a server unit [62]</p>
<p>54. 29. The system according to claim 11 wherein</p> <p>a. the checking device</p> <p>i is further operable to:</p> <p>(1) read</p> <p>(a) an identification code</p> <p>(b) from the user unit;</p> <p>(2) check</p> <p>(a) if the identification code from the user unit</p> <p>(i) corresponds to an authorized identification code; and</p> <p>(3) grant</p> <p>(a) access</p> <p>(i) by the user</p> <p>(ii) to the access protected unit,</p> <p>(b) only if the identification code from the user unit corresponds to the authorized identification code.</p>	<p>55. As to claim 29:</p> <p>a. Beatson teaches that his system's checking device, besides checking for authentication by basing on coordinate pairs comparison, is operable to:</p> <p>i read an identification code [i.e., user PIN] for the user unit;</p> <p>ii check the user PIN corresponds to an authorized user's input PIN, and</p> <p>iii grant access basing on the positive result of the checking.</p>

<p>56. 32. The checking device according to claim 30 wherein</p> <p>a. the memory is further operative</p> <p>i to store</p> <p>(1) a sequence of coordinate pairs and</p> <p>b. the processor is further operative to</p> <p>i receive</p> <p>(1) a sequence of coordinate pairs and</p> <p>ii check</p> <p>(1) the received sequence of coordinate pairs</p> <p>(2) with the stored sequence of coordinate pairs</p> <p>(3) for checking the user's authorization.</p>	<p>57. As to claim 32:</p> <p>a. Beatson teaches:</p> <p>i that his memory [66] stores</p> <p>(1) a sequence of coordinate pairs [i.e., the information that are shown in Figure 6] that is used to be used in his checking step; and</p> <p>ii that his processor [200] checks</p> <p>(1) the received sequence of coordinate pairs</p> <p>(2) with the stored sequence of coordinate pairs</p> <p>(3) for checking the user's authorization.</p>
<p>58. 33. The checking device according to claim 30, wherein</p> <p>a. the checking device</p> <p>i is integrated</p> <p>(1) with the user unit.</p>	<p>59. As to claim 33:</p> <p>a. Beatson shows that the checking device (according to applicant's claim 30)</p> <p>i is integrated</p> <p>(1) with the user unit [64].</p>
<p>60. 34. The checking device according to claim 30 wherein</p> <p>a. the memory stores</p> <p>i information</p> <p>(1) about a plurality of coordinate areas.</p>	<p>61. As to claim 34:</p> <p>a. Beatson teaches:</p> <p>i that his memory [66] stores</p> <p>(1) information</p> <p>(a) about a plurality of coordinate areas.</p>

62. 35. The checking device of claim 34 wherein a. the access protected unit i is associated (1) with one of the plurality of coordinate areas.	63. As to claim 35: a. Beatson teaches i that the protected unit [52] is associated with one of the plurality of coordinate areas ii in that Beatson teaches (1) that his access protected unit [52] (i) can provide 1) to the checking device (200) 2) those stored signature information a) for used by the checking device 3) (in which case the memory card 66 would not be necessarily needed for checking users).
64. 36. The checking device of claim 34 wherein a. a program or function i is associated (1) with one of the plurality of coordinate areas.	65. As to claim 36. a. Beatson teaches: i that in his checking device (1) one of the plurality of coordinate areas is associated with a function/program ii in that Beatson teaches (1) checking to see if a user is authorized to access protected unit, (a) which checking is inherently associated with a program which is functional to do the checking.
66. 37. The checking device of claim 30 further comprising a. a communications interface.	67. As to claim 37: a. Beatson teaches the his checking device [64] has an communication [210].

Claim Rejections - 35 USC § 103

68. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

69. Claims 28 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beatson et al (5,892,824 hereinafter Beatson) as applied to claims 24 and 30 above, and further in view of common practice in the art.

<p>70. 28. The system according to claim 24 wherein the checking device</p> <p>a. is integrated</p> <p>i with the server unit.</p>	<p>71. As to claim 28:</p> <p>a. Beatson shows that his checking device</p> <p>i is integrated</p> <p>(1) with the user unit [64].</p> <p>b. Beatson does not show that his checking device</p> <p>i is integrated</p> <p>(1) with the server unit [52, 56, 60 or 62.</p> <p>c. Official notice is hereby taken that it is a common practice in the art to do authenticate at various node in a network depending on the convenience as perceived by implementer of the authentication so as to balance work loads for improving network activities.</p> <p>d. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to shift the authentication checking process done in Beatson's element 64 to Beatson's element 52, 56, 60 or 62 to authenticate a user at user unit 64(1) having access card 66(1).</p> <p>e. The skilled person would have been motivated to do such shifting because:</p> <p>i it is a common practice in the art to do authentication at any node in a network of network nodes.</p>
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<p>72. 42. The checking device of claim 30 wherein the processor is further operable to:</p> <p>a. read</p> <p>i an identification code (1) from a digital pen;</p> <p>b. check</p> <p>i if the identification code (a) from the digital pen (2) corresponds (a) to an authorized identification code; and</p> <p>c. grant</p> <p>i access (a) by the user (2) to the access protected unit, only if (1) the identification code from the digital pen (a) corresponds (i) to the authorized identification code.</p>	<p>73. As to claim 42:</p> <p>a. Beatson teaches that his processor [200] is to:</p> <p>i read</p> <p>(1) an identification code {i.e., the output of element 316 (notice that: (a) it would have been obvious to a person having ordinary skill in the art at the time the invention was made to (i) integrate elements 300, to 316 within element 74, 1) which integration would have been motivated because: a) it is a common practice in the art shift (as desired and with choices) components from one module to another module] and b) it is determinable that if items are not placed at one location it can be placed at another location) (b) from a digital pen [74];</p> <p>ii check (1) if the identification code from the digital pen corresponds to an authorized identification code; and</p> <p>iii grant (1) access (a) by the user (b) to the access protected unit, (2) only if the identification code from the digital pen corresponds to the authorized identification code.</p>
<p>75. 12. The system of claim 11 wherein the user unit comprises</p> <p>a. an optical sensor and</p> <p>b. image processor.</p>	<p>76. As to claim 12:</p> <p>a. Beatson does not teach that is his user unit [64] comprises</p> <p>i an optical sensor and</p> <p>ii image processor.</p> <p>b. Sekendur teaches that his user unit [Figure 7] comprises</p> <p>i an optical sensor [13] and</p> <p>ii image processor [21].</p> <p>c. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:</p> <p>i substitutes Beatson's user unit with Sekendur's user unit.</p> <p>d. The skilled person would have been motivated to use Sekendur's user unit in place of Beatson's user unit because:</p> <p>i either one of them serve the same purpose (i.e., the purpose of inputting authentication input of the same king hand written signature from which coordinates pairs are extracted).</p>

74. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beatson et al (5,892,824 hereinafter Beatson) as applied to claim 1 above, and further in view of Sekendur (5,852,434).

Provisional Obvious Double Patenting

NON-STATUTORY

77. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

78. Claim 1-8 and 43-50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of copending Application No. 09/746,781 in view of *Beatson et al* (5,892,824 hereinafter *Beatson*)

This is a provisional obviousness-type double patenting rejection.

<p>79. Claim 1 claims a method</p> <p>a. for controlling</p> <p>i access</p> <p>(1) to an access protected unit,</p> <p>b. the method comprising:</p> <p>i reading</p> <p>(1) at least one pair of coordinates</p> <p>(2) from a base;</p> <p>ii checking</p> <p>(1) if the pair of coordinates</p> <p>(a) are</p> <p>(i) within a coordinate area</p> <p>1) belonging to an authorized user; and</p> <p>iii granting</p> <p>(1) access</p> <p>(a) by the authorized user</p> <p>(b) to the access protected unit</p> <p>(2) if the coordinates</p> <p>(a) are</p> <p>(i) within the coordinate area</p> <p>1) belonging to the authorized user.</p>	<p>80. As to claim 1:</p> <p>a. Claim 11 of Patent Application 09/746,781 teaches controlling (an access to an access protected unit) by including carrying out an authenticity check.</p> <p>b. Beatson et al (5,892,824) teaches a method of</p> <p>i for controlling</p> <p>(1) access</p> <p>(a) to an access protected unit;</p> <p>ii comprising:</p> <p>(1) reading [when an individual signs a signature by using element 74]</p> <p>(a) at least one pair of coordinates [as produced by element 218];</p> <p>(b) checking [by a checking device 200],</p> <p>(i) on the basis of the at least one pair of coordinates,</p> <p>(ii) if the user is authorized to access the access-protected unit;</p> <p>(c) providing</p> <p>(i) an enabling signal,</p> <p>1) [which enabling signal in effect grants access by the authorized user to the access protected unit],</p> <p>(ii) to the access protected unit</p> <p>(iii) when the checking device determines that access is authorized.</p>	<p>c. However, Beatson does not teach:</p> <p>i that his checking</p> <p>(1) of his pair of coordinates</p> <p>(a) is to see if it is lying within the at least one coordinate area.</p> <p>d. Patent application 09/746,781 discloses and claims [see the next row of this table for the text from the application]:</p> <p>i checking</p> <p>(1) if the coordinates</p> <p>(a) are within the at least one coordinate area</p> <p>(2) for checking the user's authorization.</p>	<p>e. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:</p> <p>i make use of the teaching of Patent Application 09/746,781 and</p> <p>ii replace the checking used by Beatson with the checking used by Patent Application 09/746,781.</p> <p>f. The skilled person would have been motivated to:</p> <p>i make use of such teaching because it is also used for authentication purpose; and</p> <p>ii do such replacing because:</p> <p>(1) it is a common practice in the art to replace one authentication parameter with another authentication parameter when one is available.</p>
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81. Patent application 09/746,781 [i.e., DOCUMENT-IDENTIFIER US 20030084002 A1 titled Information management system with authenticity check] teaches the following, regarding a checking device's processor checking if the coordinates are lying within at least one coordinate areas for checking a user's authentication:
- a. Abstract Paragraph - ABTX (1):
 - i A payment product has a writing area (6c) which is intended for a user's signature. In the writing area there is a first position-coding pattern (5) which makes possible digital recording of the signature. The first position-coding pattern is a subset of a larger second position-coding pattern.
 - b. Abstract Paragraph - ABTX (2):
 - i The payment product is used in a payment system which is based on electronic payment information, which has been recorded by means of the position-coding pattern, being sent to a server unit, which utilizes the position-coding pattern to check that the payment information is valid.
 - c. Summary of Invention Paragraph - BSTX (22):
 - i [0019] The second position-coding pattern does not need to be stored in its entirety anywhere. By the fact that the first position-coding pattern is a subset of a second position-coding pattern is here meant that the coding is such that further unique first position-coding patterns can be created and that anywhere in a system where the product is used use can be made of the fact that the position of the first position-coding pattern within the second position-coding pattern can be determined.
 - d. Summary of Invention Paragraph - BSTX (37):
 - i [0034] The first position-coding pattern can thus be repeated in the additional writing areas. Alternatively, the first position-coding pattern can constitute a greater part of the second larger position-coding pattern, so that the first position-coding pattern can cover all the writing areas and so that the positions within the different writing areas can be distinguished. As a further alternative, the additional writing areas can be provided with second subsets of the larger second position-coding pattern, which subsets are not in continual correspondence with the first position-coding pattern.
 - e. Summary of Invention Paragraph - BSTX (41):
 - i [0038] If a payment product which is to be signed is provided with a position-coding pattern which is unique to the user, the security is increased greatly as an impostor must forge both a signature and a specific position-coding pattern which codes coordinates for points within a particular coordinate area.
 - f. Summary of Invention Paragraph - BSTX (51):
 - i [0048] In one embodiment, there is at least one unique user identity associated with at least certain of the regions, which user identity identifies the user unit which is authorized to record coordinates for points within the region, said information comprising the unique user identity and the server unit being arranged to use the unique user identity to check the authorization of the user when carrying out the authenticity check.
 - g. Detail Description Paragraph - DETX (25):
 - i [0097] The signal processor 16 is also programmed to analyze stored pairs of coordinates and to convert these into a polygon train which constitutes a description of how the user unit 2 has been moved across the surface which is provided with the position-coding pattern. Finally, the signal processor 16 is programmed to generate, automatically or upon command, a message which contains the polygon train and a unique user identity which is stored in the user unit and to send this information to the central unit 4. The signal processor 16 does not need to forward all the information to the central unit 4. The signal processor 16 can be programmed to analyze the recorded coordinates and only to forward information which is represented by coordinates within a particular coordinate area. The signal processor 16 can also have software for encrypting the information which is sent to the server unit 4.
 - h. Claims Text - CLTX (12):
 - i 11. A server unit for managing information, which server unit (4) is arranged to receive information from a plurality of user units (2) characterized in that the server unit (4) has access to a memory, in which there is stored information about a plurality of regions, each of which represents a coordinate area on at least one imaginary surface, the server unit is arranged to receive the said information in the form of at least two coordinates for at least one point on the imaginary surface, and the server unit is arranged, in response to the receipt of information from one of said user units, to determine to which region the coordinates belong and to carry out an authenticity check on the received information on the basis of the region affiliation.
 - i. Claims Text - CLTX (14):
 - i 13. A server unit according to claim 11 or 12, in which at least one unique user identity, which identifies the user unit which is authorized to record coordinates for points within the region, is associated with at least certain of the regions, said information comprising the unique user identity and the server unit being arranged when carrying out the authenticity check to use the unique user identity to check the authorization of the user.

<p>82. 2. The method according to claim 1 wherein the step of</p> <p>a. reading at least one pair of coordinates further comprises:</p> <p>i. recording a pattern from the base with a digital pen; and</p> <p>ii. converting the pattern into a pair of coordinates.</p>	<p>83. As to claim 2:</p> <p>a. Beatson teaches that in his method the step of reading comprising the steps of:</p> <p>i. recording (electronically writing/signing) a pattern with a digital pen; and</p> <p>ii. converting the pattern into a pair of coordinates [see to it that outputs of element 218 are coordinate pairs].</p>
<p>84. 3. The method according to claim 1 wherein</p> <p>a. the coordinate area</p> <p>i. is designated</p> <p>(1) by two pairs of coordinates,</p> <p>(a) the first coordinate pair</p> <p>(i) designating</p> <p>1) one corner of the coordinate area and</p> <p>(b) the second coordinate pair</p> <p>(i) designating</p> <p>1) a second corner of the coordinate area,</p> <p>a) wherein the second coordinate pair</p> <p>i) lies diagonal to the first coordinate pair.</p>	<p>85. As to claim 3:</p> <p>a. Claim 11 of Patent Application 09/746,781 teaches controlling (an access to a access protected unit) by including carrying out an authenticity check basing on coordinate area.</p> <p>b. Claim 1, upon which claim 3 depends, has been addressed above in the section rejecting claims under provisional obvious double patenting with reference to Beatson and Patent Application 09/746,781.</p> <p>c. Patent Application 09/746,781 also teaches [see Figure 3, for element 30]:</p> <p>i. the coordinate area [region]</p> <p>(1) is designated</p> <p>(a) by two pairs of coordinates,</p> <p>(i) the first coordinate pair [e.g., (x1, x2)]</p> <p>1) designating</p> <p>a) one corner of the coordinate area and</p> <p>(ii) the second coordinate pair [e.g., (x4, y4)]</p> <p>1) designating</p> <p>a) a second corner of the coordinate area,</p> <p>i) wherein the second coordinate pair lies diagonal to the first coordinate pair.</p>

<p>86. Claim 4 claims:</p> <p>a. The method according to claim 1, further comprising:</p> <ul style="list-style-type: none"> i reading a sequence of coordinate pairs corresponding to a displacement of the digital pen by the user; ii checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs belonging to the authorized user; and iii granting access by the authorized user to the access protected unit, only if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs belonging to the authorized user. <p>87. Claim 5 claims:</p> <p>a. The method of claim 4 wherein the stored sequence of coordinate pairs corresponds to a signature of the authorized user.</p>	<p>88. Claim 6 claims:</p> <p>a. The method according to claim 1, further comprising:</p> <ul style="list-style-type: none"> i reading a sequence of coordinate pairs corresponding to the displacement of the digital pen by the user; ii checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs associated with the access protected unit; and iii granting access by the authorized user to the access protected unit, only if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs associated with the access protected unit. 	<p>89. Claim 7 claims:</p> <p>a. The method according to claim 1, further comprising:</p> <ul style="list-style-type: none"> i reading a sequence of coordinate pairs corresponding to a displacement of the digital pen by the user; ii checking if the sequence of coordinate pairs favorably compares to a stored sequence of coordinate pairs associated with a program or function of the access protected unit; and iii activating the program or function of the access protected unit if the sequence of coordinate pairs favorably compares to the stored sequence of coordinate pairs associated with the program or function of the access protected unit. 	<p>90. As to claims 4, 5, 6 and 7:</p> <p>a. Preliminary matters:</p> <ul style="list-style-type: none"> i The state of the stored coordinate pairs (1) being that they are associated with (a) either (i) the access protected unit, or (ii) a program of the access protected unit, or (iii) a function of the access protected unit, or (iv) the authorized user (2) is not a step of the method. ii The combination of the steps of reading, checking and granting has been addressed above in the section used to reject claim 1. iii No patentable weight is given to a state of the stored coordinate pairs since: <ul style="list-style-type: none"> (1) stored coordinate pairs (of the different state) still have to be compared by the same input entered by the user (i.e., the user's displacement of a digital pen) and thus they represent the same information, and (2) the state of the stored coordinate pairs does not modify the sequence of the steps (as seen in claims 1, 4, 6 and 7). b. Beatson teaches layers of checking [see col. 19 for one passage of first authenticity test (using a value stored in his card 66) and next authenticity check (using coordinate pairs of signatures)]. <ul style="list-style-type: none"> i Beatson's layers of checking enhance his security check. c. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to associate a set of coordinates pair with various meanings. d. The skilled person would have been motivated to: <ul style="list-style-type: none"> i associate (1) the coordinate pairs (2) with either (a) the access protected unit, or (b) a program of the access protected unit, or (c) a function of the access protected unit, or (d) the authorized user ii because Beatson's coordinate pairs are, in one way or another, associated with an authorized user and are associated within the system comprising the associated protected unit, the associated program/function of the access protect unit.
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<p>91. 8. The method according to claim 1 further comprising:</p> <ul style="list-style-type: none">a. reading i an identification code (1) from a digital pen [74];b. checking i if the identification code from the digital pen corresponds to an authorized identification code; andc. granting i access (1) by the user (2) to the access protected unit, ii only if the identification code from the digital pen corresponds to the authorized identification code.	<p>92. As to claim 8:</p> <ul style="list-style-type: none">a. Beatson teaches that his processor [200] is to:<ul style="list-style-type: none">i read (1) an identification code {i.e., the output of element 316(a) from a digital pen [74] (notice that:<ul style="list-style-type: none">(i) it would have been obvious to a person having ordinary skill in the art at the time the invention was made to<ul style="list-style-type: none">1) integrate elements 300 to 316 within element 74,a) which integration would have been motivated because:<ul style="list-style-type: none">i) it is a common practice in the art shift (as desired and with choices) components from one module to another module] andii) it is determinable that if items are not placed at one location it can be placed at another location);ii check (1) if the identification code from the digital pen corresponds to an authorized identification code; andiii grant (1) access (a) by the user (b) to the access protected unit, (2) only if the identification code from the digital pen corresponds to the authorized identification code.
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<p>93. Claim 43 claims a computer-readable medium</p> <ul style="list-style-type: none"> a. containing <ul style="list-style-type: none"> i. instructions <ul style="list-style-type: none"> (1) for controlling <ul style="list-style-type: none"> (a) access <ul style="list-style-type: none"> (i) to an access protected unit, (2) the instructions comprising: <ul style="list-style-type: none"> (a) reading <ul style="list-style-type: none"> (i) at least one pair of coordinates (ii) from a base; (b) checking <ul style="list-style-type: none"> (i) if the pair of coordinates <ul style="list-style-type: none"> 1) are <ul style="list-style-type: none"> a) within a coordinate area i) belonging to an authorized user; and (c) granting <ul style="list-style-type: none"> (i) access <ul style="list-style-type: none"> 1) by the authorized user 2) to the access protected unit (ii) if the coordinates <ul style="list-style-type: none"> 1) are <ul style="list-style-type: none"> a) within the coordinate area i) belonging to the authorized user. 	<p>94. As to claim 43:</p> <ul style="list-style-type: none"> a. Beatson et al (5,892,824) <ul style="list-style-type: none"> i. inherently teaches <ul style="list-style-type: none"> (1) a computer-readable medium that is: <ul style="list-style-type: none"> (a) containing <ul style="list-style-type: none"> (i) instructions <ul style="list-style-type: none"> 1) for controlling <ul style="list-style-type: none"> a) access <ul style="list-style-type: none"> i) to an access protected unit, 2) the instructions [causing his processor 200 to perform the method of claim 1, which method] comprising [the steps (that have been addressed above in the section rejecting claim 1) of]: <ul style="list-style-type: none"> a) reading <ul style="list-style-type: none"> i) at least one pair of coordinates ii) from a base; b) checking <ul style="list-style-type: none"> i) if the pair of coordinates are within a coordinate area belonging to an authorized user; and c) granting <ul style="list-style-type: none"> i) access by the authorized user to the access protected unit ii) if the coordinates are within the coordinate area belonging to the authorized use; and (2) [which teaching is inherent because Beatson's system is of a microprocessor, (a) which microprocessor 200 carries out the instructions according to Figures 8 and 8F (i) which instructions are inherently contained in a computer-readable medium that is accessible by the microprocessor 200].
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- a. These claims have limitations that are similar to those of claims 1-8, and thus are rejected with the same reasons applied against claims 2-8 under this provisional obvious double patenting.

<p>96. 31. The checking device according to claim 30 wherein</p> <p>a. the processor is further operative to</p> <p>i check</p> <p>(1) if the coordinates</p> <p>(a) are lying within the at least one coordinate area</p> <p>(2) for checking the user's authorization.</p>	<p>97. As to claim 31:</p> <p>a. Claim 11 of Patent Application 09/746,781 teaches a checking device for carrying out an authenticity check.</p> <p>b. Claim 30, upon which claim 31 depends, has been addressed above in the section rejecting claims under 35 USC 102 (b) with reference to Beatson.</p> <p>c. Beatson, however, does not teach:</p> <p>i that the processor (that is in his checking device) .</p> <p>(1) checks</p> <p>(a) if the coordinates</p> <p>(i) are lying within the at least one coordinate area</p> <p>(b) for checking the user's authorization.</p> <p>d. Patent application 09/746,781 discloses and claims [see the next row of this table for text from the application]:</p> <p>i checking</p> <p>(1) if the coordinates</p> <p>(a) are within the at least one coordinate area</p> <p>(2) for checking the user's authorization.</p> <p>e. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:</p> <p>i make use of the teaching of Patent Application 09/746,781 and</p> <p>ii replace the parameters used by Beatson with the parameters used by Patent Application 09/746,781.</p> <p>f. The skilled person would have been motivated to:</p> <p>i make use of such teaching because it is also used for authentication purpose; and</p> <p>ii do such replacing because:</p> <p>(1) it is a common practice in the art to replace one authentication parameter with another authentication parameter when one is available.</p>
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98. Patent application 09/746,781 [i.e., DOCUMENT-IDENTIFIER US 20030084002 A1 titled Information management system with authenticity check] teaches the following, regarding a checking device's processor checking if the coordinates are lying within at least one coordinate areas for checking a user's authentication:
- a. Abstract Paragraph - ABTX (1):
 - i A payment product has a writing area (6c) which is intended for a user's signature. In the writing area there is a first position-coding pattern (5) which makes possible digital recording of the signature. The first position-coding pattern is a subset of a larger second position-coding pattern.
 - b. Abstract Paragraph - ABTX (2):
 - i The payment product is used in a payment system which is based on electronic payment information, which has been recorded by means of the position-coding pattern, being sent to a server unit, which utilizes the position-coding pattern to check that the payment information is valid.
 - c. Summary of Invention Paragraph - BSTX (22):
 - i [0019] The second position-coding pattern does not need to be stored in its entirety anywhere. By the fact that the first position-coding pattern is a subset of a second position-coding pattern is here meant that the coding is such that further unique first position-coding patterns can be created and that anywhere in a system where the product is used use can be made of the fact that the position of the first position-coding pattern within the second position-coding pattern can be determined.
 - d. Summary of Invention Paragraph - BSTX (37):
 - i [0034] The first position-coding pattern can thus be repeated in the additional writing areas. Alternatively, the first position-coding pattern can constitute a greater part of the second larger position-coding pattern, so that the first position-coding pattern can cover all the writing areas and so that the positions within the different writing areas can be distinguished. As a further alternative, the additional writing areas can be provided with second subsets of the larger second position-coding pattern, which subsets are not in continual correspondence with the first position-coding pattern.
 - e. Summary of Invention Paragraph - BSTX (41):
 - i [0038] If a payment product which is to be signed is provided with a position-coding pattern which is unique to the user, the security is increased greatly as an impostor must forge both a signature and a specific position-coding pattern which codes coordinates for points within a particular coordinate area.
 - f. Summary of Invention Paragraph - BSTX (51):
 - i [0048] In one embodiment, there is at least one unique user identity associated with at least certain of the regions, which user identity identifies the user unit which is authorized to record coordinates for points within the region, said information comprising the unique user identity and the server unit being arranged to use the unique user identity to check the authorization of the user when carrying out the authenticity check.
 - g. Detail Description Paragraph - DETX (25):
 - i [0097] The signal processor 16 is also programmed to analyze stored pairs of coordinates and to convert these into a polygon train which constitutes a description of how the user unit 2 has been moved across the surface which is provided with the position-coding pattern. Finally, the signal processor 16 is programmed to generate, automatically or upon command, a message which contains the polygon train and a unique user identity which is stored in the user unit and to send this information to the central unit 4. The signal processor 16 does not need to forward all the information to the central unit 4. The signal processor 16 can be programmed to analyze the recorded coordinates and only to forward information which is represented by coordinates within a particular coordinate area. The signal processor 16 can also have software for encrypting the information which is sent to the server unit 4.
 - h. Claims Text - CLTX (12):
 - i 11. A server unit for managing information, which server unit (4) is arranged to receive information from a plurality of user units (2) characterized in that the server unit (4) has access to a memory, in which there is stored information about a plurality of regions, each of which represents a coordinate area on at least one imaginary surface, the server unit is arranged to receive the said information in the form of at least two coordinates for at least one point on the imaginary surface, and the server unit is arranged, in response to the receipt of information from one of said user units, to determine to which region the coordinates belong and to carry out an authenticity check on the received information on the basis of the region affiliation.
 - i. Claims Text - CLTX (14):
 - i 13. A server unit according to claim 11 or 12, in which at least one unique user identity, which identifies the user unit which is authorized to record coordinates for points within the region, is associated with at least certain of the regions, said information comprising the unique user identity and the server unit being arranged when carrying out the authenticity check to use the unique user identity to check the authorization of the user.

99. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

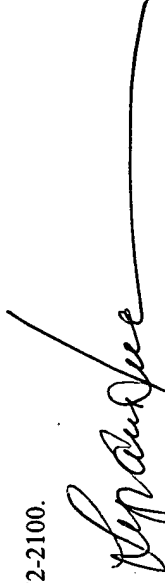
100. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly V. Hua whose telephone number is (571) 272-3853. The examiner can normally be reached on Monday to Friday from 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Kim, can be reached on (571) 272-3858. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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101. The applicant is hereby notified that:

a. The new phone number for TC 2100 receptionist is (571) 272-2100.



Ly V. Hua
Primary Examiner
Art Unit 2135

Lvh

October 29, 2004